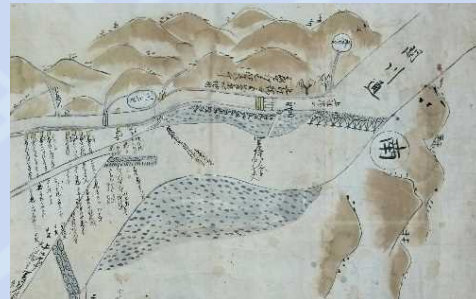


Sekikawa Suikei Land Improvement District and The Levy Reduction/Exemption System Applied to Kyakusui Area

- History of 340 years -
Beyond many hardships to this day



Sekikawa-suikei
Land Improvement District



Construction of 2 main canals

Nakae Irrigation Canal 1673 - 1675

Public
project



- Edo era (app. 17-19C)
- Public work by local governor
- Maintained by public fund

Uwae Irrigation Canal 1573 - 1781

Farmers'
endeavor



- The Age of provincial wars
- Constructed by 3 projects taking 130 years
- Fund and labor by farmers themselves

Background of Kyakusui area

Farmers in upstream site

- The wide canal of 14 m breadth is unwelcomed.
- Because farmlands decrease.



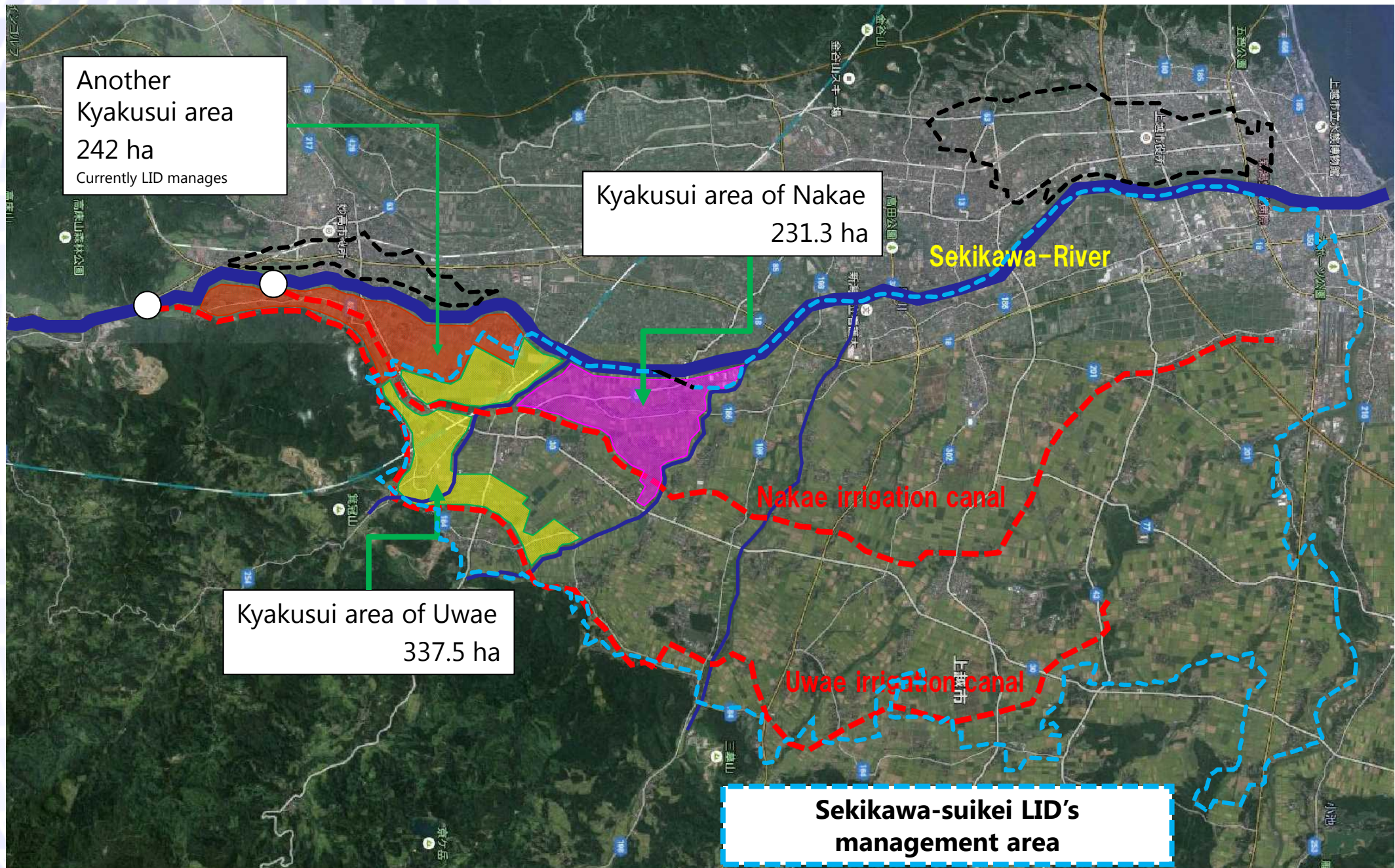
Farmers in downstream site

- We'll incur all your water due
- We need your cooperation to expand the canal to the downstream site.

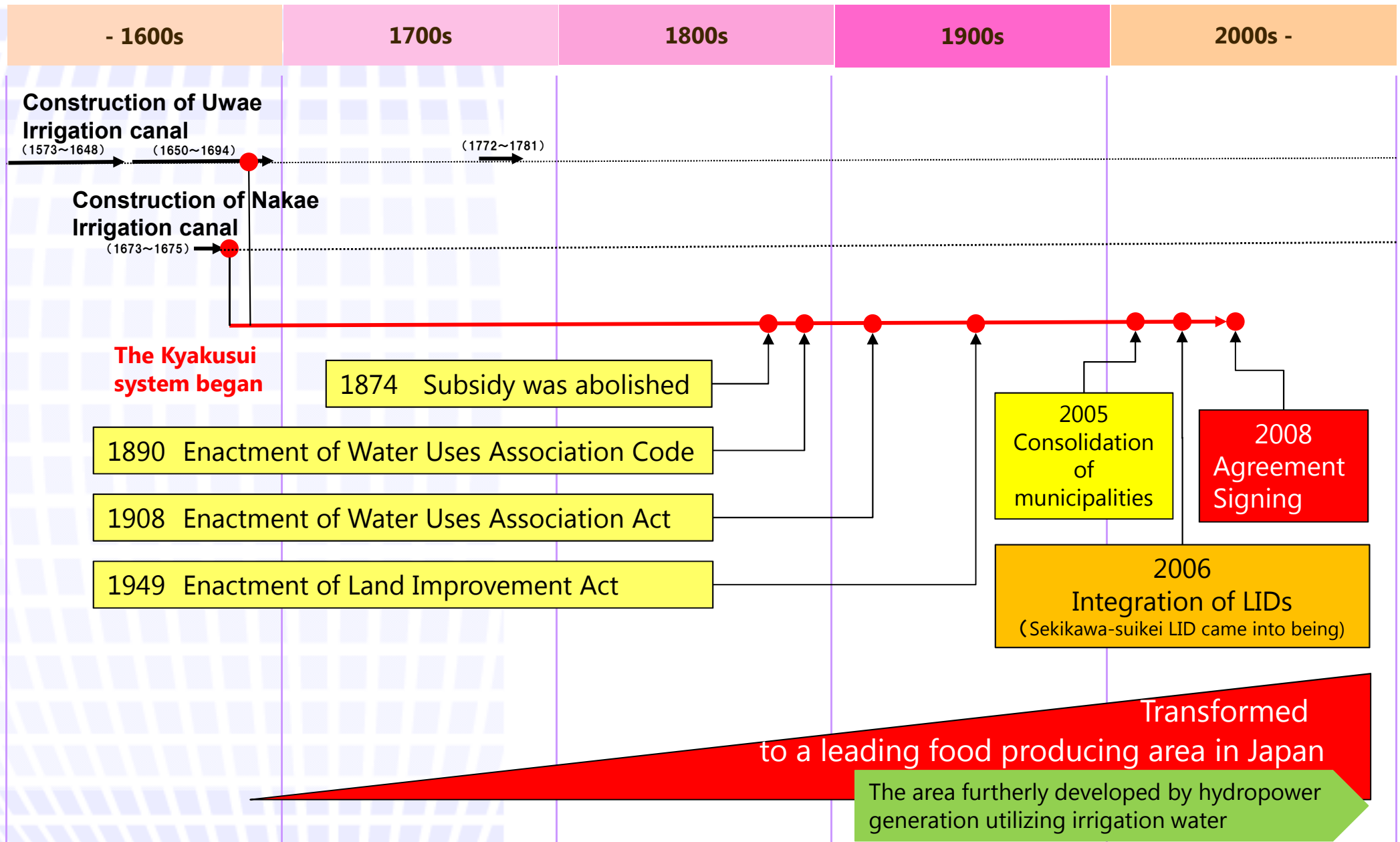


We are pleased to accept the suggestion of downstream farmers. Let's do it together.

Location map of Kyakusui area

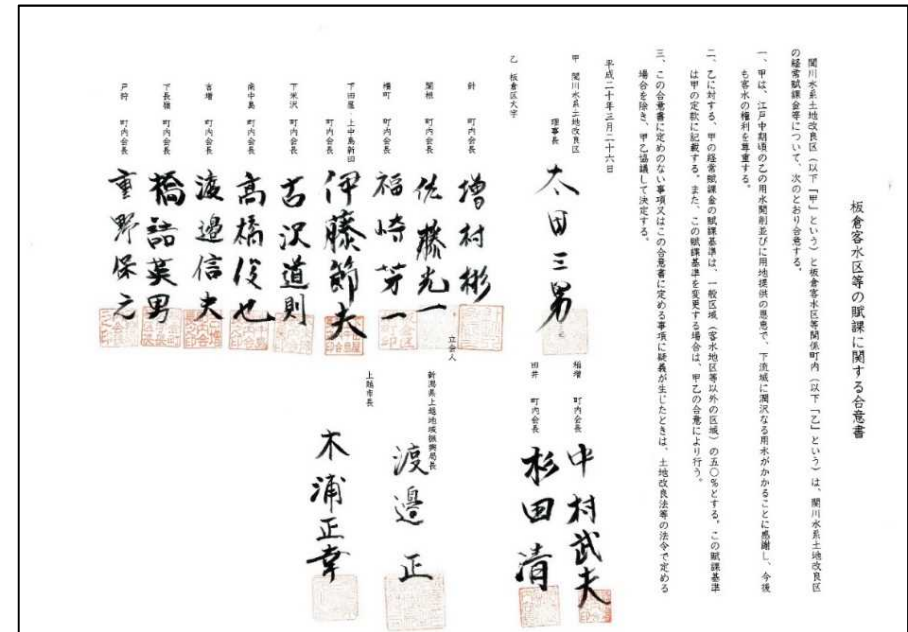


The history of Kyakusui area



The historic signing ceremony of agreement

26 March, 2006



Memorandum of Understanding
regarding Levy in Kyakusui areas

Sekikawa-suikei Land Improvement District (hereinafter referred to as "the first party") and Kyakusui areas including Itakura area (hereinafter referred to as "the second party") assume and agree the matters regarding levy as follows;

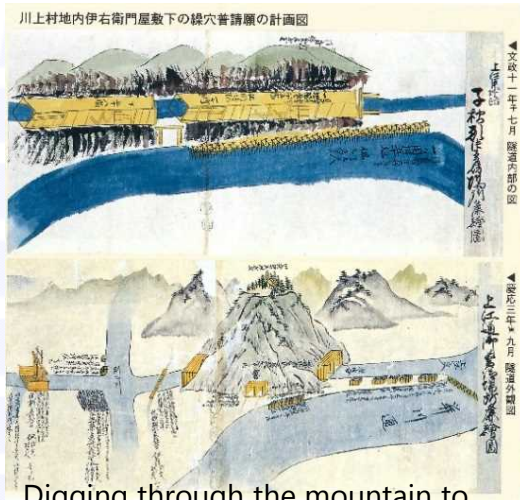
1. The first party respects the right of Kyakusui and appreciates the affluent water attributes to the provided sites by the second party in Edo era.
2. The first party entails 50% of levy in general areas (which indicate the areas except for Kyakusui areas) to the second party. This proportion shall be stipulated in the articles of incorporation of the first party. The first party and the second party shall agree in the event of changing the proportion.
3. Any question arising out of, or in connection with, this MoU or any matter not stipulated herein shall be settled each time upon consultation between both parties in the case the Land Improvement Act does not stipulates.

26th March, 2008



2 main canals managed by upstream and downstream people together

Uwae Irrigation canal



Digging through the mountain to construct the canal (1810)



Canal management in mountainous area is still a hard work(2016)



The canal tunnel after a large-scale renovation (1931)



Cherry trees are planted along the canal running through the Uwae irrigation canal memorial park

Nakae Irrigation canal



Nakae irrigation canal used to be earthen canal around 1940



Nakae irrigation canal became stone masonry canal in 1952



Nakae irrigation canal was changed to concrete canal after a large-scale national project in 1980



New history with Kyakusui area

Mass media



Mass media played up the agreement. "New history with a strong bond"

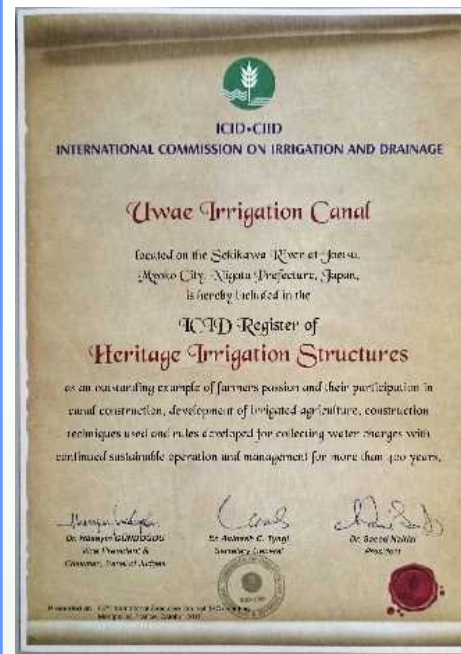
Prize-giving for distinguished service of water resource



August, 2009

The Ministry of Land, Infrastructure, Transport and Tourism awarded the prize to Sekikawa-suikei LID.

Heritage Irrigation Structures



October, 2015

Uwae Irrigation canal (including Kyakusui area system) was registered as the Heritage Irrigation Structures.

The socio-economic development

The Brand rice "KOSHIHIKARI" big production area



■ Rice harvest (2015)

Total Japan: 7,989,000 tons

Total Niigata Prefecture: 619,200 tons
(the most of the 47 prefectures country-wide)

Juetsu City: 59,500 tons
(across 11,200 hectares),

to which the Nakae Irrigation Canal contributes 2,451 hectares,
and the Uwae Irrigation Canal, 2,367 hectares.

25, 600tons (43%)

Co-existence and co-prosperity with water power generations

Laid the foundation of Joetsu regional industry



In 1939, irrigation water
began to flow down
through the hydropower
plant

Invited and established factories

- Many factories were invited and established
8 out of 11 large factories with 400 employees were
established in 1962
- 《steel/nonferrous metal industry》 5 factories
Manganese alloy, enameled wires, special steels, stainless
steels, drill, etc.
- 《chemical industry》 3 factories
Soda chlorine compound, acetic acid compound,
Nitrogenous lime fertilizer

The position of chemical industry in Joetsu region

Shipment from the chemical industry in Joetsu in 1965
was 427 million dollars, which was 52.2% of the gross
shipment from Niigata prefecture.